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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,921	08/20/2003	**Sai Suresh Ganesamoorthi**	2705-282	9294

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EXAMINER	
SHAND, ROBERTA A	
ART UNIT	PAPER NUMBER
2472	
MAIL DATE	DELIVERY MODE
11/25/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/645,921	GANESAMOORTHI ET AL.	
	Examiner	Art Unit	
	Roberta A. Shand	2472	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 July 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4-10,13-15 and 18-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4-10,13-15 and 18-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 4-10, 13-15 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knappe (U.S. 6603774 B1) in view of Groenendaal (U.S. 6975625 B1) and further in view of Hwang (U.S. 6535505 B1).

3. Regarding claims 4 and 5, Knappe teaches a system for allocating a plurality of DSPs to handle calls in a voice gateway (fig. 1 and col. 2, line 41 – col. 3, line 6), said calls utilizing a plurality of different codecs, said codecs requiring a plurality of different amounts of DSP resources (col. 3, lines 7-45, Knappe teaches providing a H323 capability list of codecs), the system including: means for first determining if the call can be assigned to a DSP on a best fit basis (col. 3, lines 47-65).

4. Knappe does not teach assigning the call to a DSP utilizing load balancing.

5. Groenendaal teaches (col. 4, lines 13-24) assigning the call to a DSP utilizing load balancing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Knappe to include Groenendaal's load balancing to maintain quality of service.

6. While Knappe and Groenendaal teaches best fit and load balancing methods, Knappe and Groenendaal do not explicitly teach selecting from pools of DSPs

7. Hwang teaches (fig. 34) selecting from pools of DSPs. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Knappe and Groenendaal to include Hwang's pools of DSPs for flexible DSP management.

8. Regarding claims 6 and 22, Hwang teaches (col. 24, lines 22-42) the resource groups take into account which codecs have a same first channel penalty (weight).

9. Regarding claims 7 and 8, Knappe teaches a method of allocating tasks to a plurality of DSPs to handle calls in a voice gateway that receives calls (fig. 1 and col. 2, line 41 – col. 3, line 6), said calls utilizing a plurality of different codecs, at least some of said codecs requiring different amounts of DSP resources (col. 3, lines 7-45, Knappe teaches providing a H323 capability list of codecs), said method including the steps of: establishing a best fit codec resource (col. 3, lines 47-65).

10. Knappe does not teach assigning the call to a DSP utilizing load balancing.

11. Groenendaal teaches (col. 4, lines 13-24) assigning the call to a DSP utilizing load balancing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Knappe to include Groenendaal's load balancing to maintain quality of service.

12. While Knappe and Groenendaal teaches best fit and load balancing methods, Knappe and Groenendaal do not explicitly teach selecting from pools of DSPs

13. Hwang teaches (fig. 34) selecting from pools of DSPs. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Knappe and Groenendaal to include Hwang's pools of DSPs for flexible DSP management.

14. Regarding claims 9 and 14, Hwang teaches (fig. 34) the calls are assigned on a best fit basis using a best fit pool.

15. Regarding claims 10 and 15, Hwang teaches the best fit pool has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resource (col. 23, lines 53 – col. 24, lines8) and for each particular resource group said pool indicates which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group (col. 24, lines 9-21).

16. Regarding claims 13 and 18-20, Hwang teaches Hwang teaches (col. 24, lines 22-42) the codecs in each resource group have a same first channel penalty (weight).

17. Regarding claim 21, Knappe teaches a computer readable medium having stored thereon sequences of instructions for allocating a plurality of resources to handle tasks (fig. 1 and col. 2, line 41 – col. 3, line 6), said tasks utilizing a plurality of different amounts of resources (col. 3, lines 7-45, Knappe teaches providing a H323 capability list of codecs), said sequences of instructions including instructions for: first determining if a task can be assigned to a resource on a best fit basis (col. 3, lines 47-65)

18. Knappe does not teach assigning the call to a DSP utilizing load balancing.

19. Groenendaal teaches (col. 4, lines 13-24) assigning the call to a DSP utilizing load balancing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Knappe to include Groenendaal's load balancing to maintain quality of service.

20. While Knappe and Groenendaal teaches best fit and load balancing methods, Knappe and Groenendaal do not explicitly teach selecting from pools of DSPs

21. Hwang teaches (fig. 34) selecting from pools of DSPs. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Knappe and Groenendaal to include Hwang's pools of DSPs for flexible DSP management.

22. Regarding claim 23, Knappe teaches (col. 2, lines 52-61) the resources are codec utilizing DSP resources.

23. Claims 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knappe in view of Groenendaal further in view of Hwang and yet further in view of McGuire (U.S. 6996615 B1).

24. Regarding claim 24, Knappe teaches a method of allocating tasks to a plurality of DSPs to handle calls in a voice gateway that receives calls (fig. 1 and col. 2, line 41 – col. 3, line 6), said calls utilizing a plurality of codecs, at least some of which utilize different amounts of DSP

resources (col. 3, lines 7-45, Knappe teaches providing a H323 capability list of codecs), said method including the steps of: first determining if a particular call can be assigned to a DSP on a best fit basis (col. 3, lines 47-65)

25. Knappe does not teach assigning the call to a DSP utilizing load balancing.

26. Groenendaal teaches (col. 4, lines 13-24) assigning the call to a DSP utilizing load balancing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Knappe to include Groenendaal's load balancing to maintain quality of service.

27. While Knappe and Groenendaal teaches best fit and load balancing methods, Knappe and Groenendaal do not explicitly teach selecting from pools of DSPs

28. Hwang teaches (fig. 34) selecting from pools of DSPs. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Knappe and Groenendaal to include Hwang's pools of DSPs for flexible DSP management.

29. Knappe, Groenendaal and Hwang do not teach using a pointer to indicate the call load groups having a lightest load.

30. McGuire teaches (col. 2, lines 8-24) using a pointer to indicate the call load groups having a lightest load. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Knappe, Groenendaal and Hwang to include McGuire's pointer to efficiently acquire load balancing.

Response to Arguments

31. Applicant's arguments with respect to claims 4-10, 13-15 and 18-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A. Shand whose telephone number is (571)272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.

33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

34. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roberta A. Shand
/R. A. S./
Examiner, Art Unit 2472

/William Trost/
Supervisory Patent Examiner, Art Unit 2472